CLAIMS

1. [previously presented] A scanner for reading bar codes comprising:

a plurality of sensors; and

a corresponding plurality of light sources;

said sensors and light sources arranged such that each one of said plurality of sensors senses reflected light primarily from a corresponding light source, wherein all of said sensors are operative to read the same bar code elements in succession.

2. [original] The scanner of claim 1 wherein said plurality of sensors are arranged in a side-by-side relationship such that said bar code is read a plurality of times each time said scanner is passed over said bar code.

3. [original] The scanner of claim 2 wherein said sensors are light sensing diodes and wherein said light sources are red light emitting diodes.

4. [previously presented] The scanner of claim 2 wherein said sensors are spaced about 2 mm from each other.

5. [original] The scanner of claim 2 wherein said bar code is read by each of said plurality of light sensors in series.

6. [original] The scanner of claim 5 wherein a signal is received from each of said light sensors, said signal comprising an analog bar code base band signal modulated by a high frequency signal.

7. [original] The scanner of claim 6 further comprising: a mixer, wherein said signal from plurality of light sensors is multiplied by the modulation signal for synchronous demodulation; and a threshold detector; wherein said demodulated signals from said mixer is reshaped and converted from an analog to a binary digital signal by said threshold detector.

8. [original] The scanner of claim 7 further comprising a logic circuit having as input said plurality of digital signals, wherein said logic circuit processes said digital signals.

9. [original] The scanner of claim 8 wherein each of said digital signals received from said each of said light sensors is displaced in time from said signals from all other light sensors, due to said light sensors being physically spaced from one another.

10. [original] The scanner of claim 9 wherein said logic circuit time aligns said plurality of digital signals.

11. [original] The scanner of claim 8 wherein said logic circuit performs an edge alignment of said digital signals to compensate for a non-constant scanning speed.

12. [original] The scanner of claim 8 wherein said logic circuit performs a bit-wise comparison of said plurality of digital signals and corrects read errors via a bitwise majority voting scheme.

13. [original] The scanner of claim 6 wherein said high frequency modulating signal is produced as said light sources are sequentially cycled at a predetermined rate.

14. [previously presented] The scanner of claim 13 wherein said predetermined cycling rate is about 100 kHz.

15. [original] The scanner of claim 13 wherein each of said light sources is out of phase with respect to all other light sources.

16. [original] The scanner of claim 6 wherein said high frequency modulating signal is produced as said plurality of light sensors are sampled in a sequential manner at a predetermined rate.

17. [previously presented] The scanner of claim 16 wherein said predetermined sampling rate is about 100 kHz.

18. [original] The scanner of claim 1 wherein there are three light sensors and three corresponding light sources.

19. [cancelled]

20. [previously presented] The scanner of claim 18 further comprising: circuitry for modulating said light sources at a high frequency to produce a signal comprising a bar code baseband signal modulated by said high frequency.

21. [original] The manual scanner of claim 20 wherein said improvement further comprises: a logic circuit for performing bit wise comparison of said signals read from said plurality of light sensors and for correcting read errors via a bitwise majority voting scheme.

22 – 28 [cancelled]